

SPEC PAK[®]

Solar 5 Position Mid Power

- Solar Power • Wind Power • DC Lighting • Inverters • Battery Backup • IP68 Rated
- LED Lighting • Solar Panels • Combiner Boxes • Hydro-Electricity • Micro Inverters



APP
Anderson Power Products[®]

An **IDEAL** Company

SPECIFICATIONS

UL6703 MECHANICAL

Operating Temperature	UL 6703	-40 to 90°C	-40 to 194°F
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Electrical

Current Rating (Amperes)	UL 6703		
8 AWG		37A	
Voltage Rating		600V	
Grounding	UL 2238, Sec 37.8	UL Tested	
Environmental Seal	UL6703	IP68 (mated only)	

UL1977 MECHANICAL

Environmental Seal	IEC 60529	IP 68	
	UL 50E	UL Approved	
Wire Size	8 AWG	8.4 mm ²	
Operating Temperature	UL 1977	-40 to 105°C	-40 to 221°F
Mating Cycles (no load)		250 min	
Mating Force (nominal)		28 lbf	125 N
Unmating Force		12 lbf	53 N
Contact Retention Force (min)		50 lbf	222 N
Touch Safe (IEC 60529)		IP 20 (female side only)	
Enclosure Ratings		UL 50E 4/4x *	

Electrical

Current Rating (Amperes)	UL 1977	CSA
8 AWG	60A	40A
Voltage Rating	UL 1977 (AC/DC)	600V
Grounding	UL 2238, Sec 37.8	Impedance
Contact Resistance (average)		0.300 Milliohms

* Need stainless hardware- type 304 or 316

MATERIALS

Shell, Housing & Sealing Nut	PC / PBT
Lanyard	Nylon / Polyester
Contact Holders	PBT- GF
Contact Retention Clip	Be-Cu
Latch / Screws	Stainless Steel
Panel Gasket	Silicone
Sealing Gland	EPDM
Flammability	UL94 V-0
Glow Wire	960°C (GWFI) 825°F (GWIT)
Weatherability	UL 746C F1
Sockets	Copper
SC08-GH	Ag plating over Ni
SC08-SN	Ag plating over Ni
Pins	Copper
PP08SGH	Ag plating over Ni
PC08SSN	Ag plating over Ni

Silver = Ag Nickel = Ni

IEC 61984

ATTRIBUTES

AMP Rating AC	60A
Voltage Rating AC	800V AC (operational)
Finger Safety **	IEC 60529
Protection Degree	IP20 Unmated, IP68 Mated
Wire Size Tested	8 AWG
Contact Series Tested	PC08SSN, PP08SGH SC08-SN, SC08-GH
Climatic Testing (Cold, Heat & MFG)	IEC 60512 Test -11j, 11i & 11g
Cycle Life	IEC 60512 Test 9A- 5000 Cycles
Mechanical Strength Impact	IEC 60512 @ 29.5 Inches - dropped 8 times
Temperature Range	-40 to 105°C, -40 to 221°F

PROTECTION

Touch Safety with Finger Proof Housings & Wire Contacts

* In mated and unmated condition, for standard 8 AWG wire contacts (only)

** Female side unmated

IEC 60950-1

Creepage / Clearance per IEC 60950-1	9.55 (mated or unmated)
Material Group	IIIa

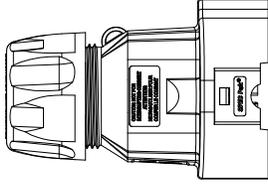
* In mated and unmated condition, for standard 8 AWG wire contacts (only)

** Female side unmated

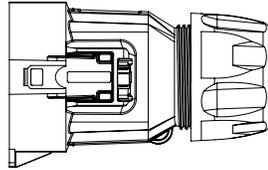
ORDERING INFORMATION

SPEC Pak® is a highly configurable environmentally sealed connector. For convenience, follow the steps below to determine component part numbers.

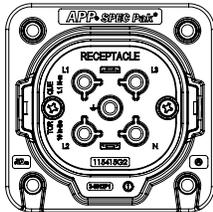
Step 1: Select Shell



PK1-076D05
Inline Receptacle Shell



PK6-076D05
Plug Shell

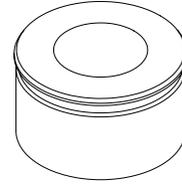


PK2-076D05
Panel Mount Receptacle & Gasket

Description	Part Numbers
Minimum Quantity	25
Inline Receptacle Shell	PK1-076D05
Plug Shell	PK6-076D05
Panel Mount Receptacle & Gasket	PK2-076D05
Receptacle Cover Kit	PK9-076 (shown on back page)
Plug Cover Kit	PK9P-076 (shown on back page)

- Contact holders are available with multiple keys, please inquire.

Step 2: Select Sealing Gland



* Define:

	Number of Wires	Wire OD
Wires		
- Discrete	_____	_____
- Bundled	_____	_____

- * Select wire protection that will accommodate the number of wires and outer diameter (OD) of the wire used in your application.
- * Wire protection is required for use with inline receptacle shell (PK1-076D05) and plug shell (PK6-076D05) to obtain IP68 seal.

Number of Holes	Cable Range Wire Outer Diameter mm (in)	Sealing Grommet Part Number Only
Minimum Quantity		10
1	20 mm (0.79)	B02266P7

- For other wire configurations contact manufacturer

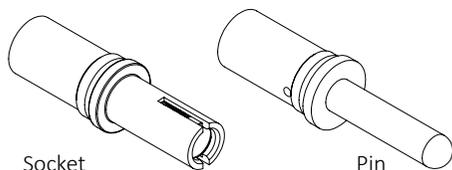
Wire Test Approval

- Type TC-ER, 8 AWG 5/C sunlight resistant
- Rated minimum 90°C dry: 90°C wet
- 600V with outer diameter of cord 20 mm (0.79)

Torque Requirements

- Hand tighten. Using a 44 mm wrench or strap wrench, tighten an additional 3/4—1 turn.
- 7.9 Nm (70 in-lb)

Step 3: Select Contacts



* Define:

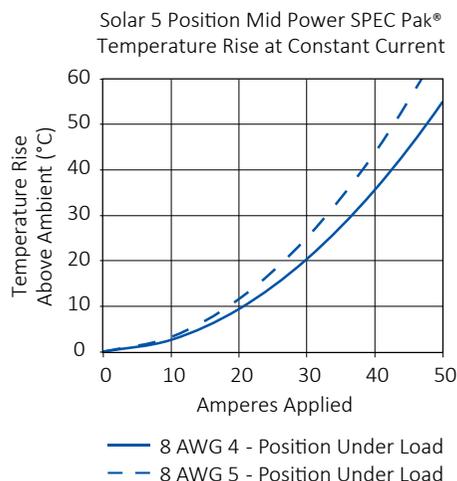
	Number of Circuits	Wire Gauge
Contacts		
- Power	_____	_____
- Other	_____	_____

Amps (continuous): _____ Max amps at _____ Volts

* Select power and/or ground contacts appropriate for your wire size (AWG or mm²)

- Sockets are used in the receptacles (part numbers PK1-076D05 & PK2-076D05)
- Pins are used in the plug (part number PK6-076D05)
- Solid wires not recommended

TEMPERATURE CHART - PER UL 1977



Description	Part Numbers
Minimum Quantity	10
Power Drawer® 8 AWG Socket Crimp, Hot Plug/Ground	SC08-GH
Power Drawer® 8 AWG Socket Crimp, Standard Mate	SC08-SN
Power Drawer® 8 AWG Pin Crimp, Hot Plug/Ground	PP08SGH
Power Drawer® 8 AWG Pin Crimp, Standard Mate	PC08SSN

TOOLING INFORMATION

Wire Size		Part Number	Description	Crimp Tools						
AWG	MM ²	Power Contact		Pneumatic Bench Tool	+ Die	+ Locator	OR	Daniels Mfg Tool *		
								Tool	Die	Locator
8 to 10	8.4 to 6.0	SC08-GH	POWER DRAWER CONT. 8 AWG SOC.CRIMP, FIRST MATE GROUND	1387G1	1388G6	1389G19	OR	M22520/23-01	M22520/23-2	M22520/23-9
		SC08-SN	POWER DRAWER CONT. 8 AWG SOC.CRIMP, STD.MATE					M22520/23-01	M22520/23-2	M22520/23-9
		PP08SGH	POWER DRAWER CONT. 8 AWG PIN,CRIMP, STD.MATE, FIRST MATE GROUND					M22520/23-01	M22520/23-2	M22520/23-9
		PC08SSN	POWER DRAWER CONT. 8 AWG PIN,CRIMP, STD.MATE					M22520/23-01	M22520/23-2	M22520/23-9
		M81969/14-06	INSERT AND EXTRACT TOOL							
N/A		PKT-076TO1	MID POWER SOLAR SPEC PAK RELEASE TOOL							

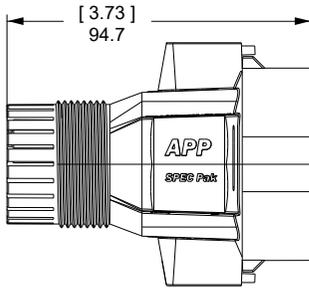
* Must contact Daniels directly for this tooling option, www.dmctools.com



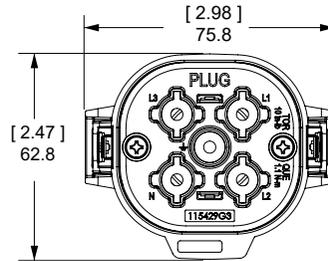
DIMENSIONS

Plug Shell | PK6-076D05

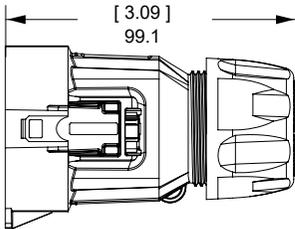
Top View



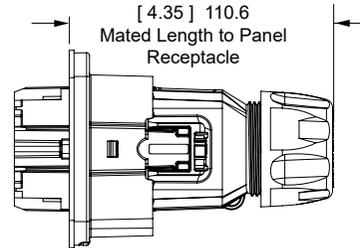
Front View



Side View

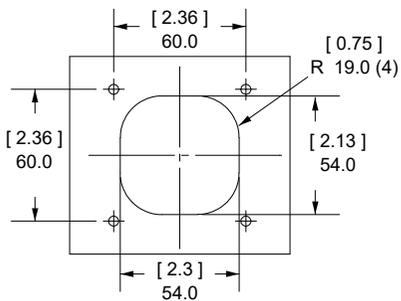


Mated View

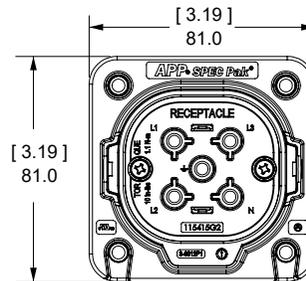


Panel Mount Receptacle & Gasket | PK2-076D05

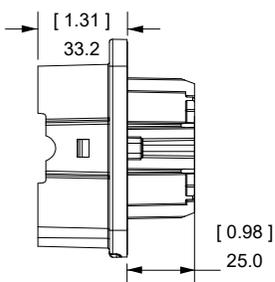
Panel Cut Out



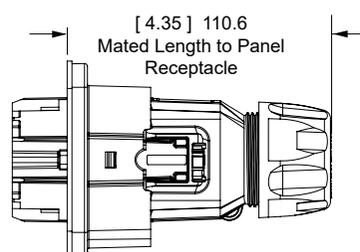
Front View



Side View

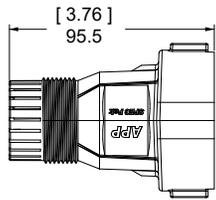


Mated View

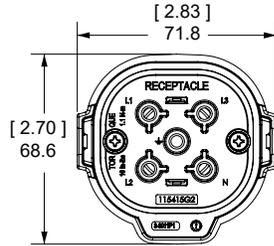


Inline Receptacle Shell | PK1-076D05

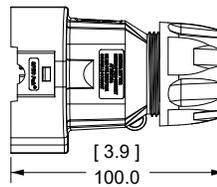
Top View



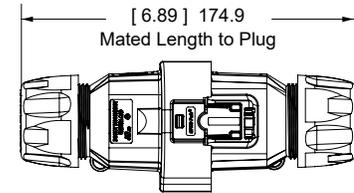
Front View



Side View

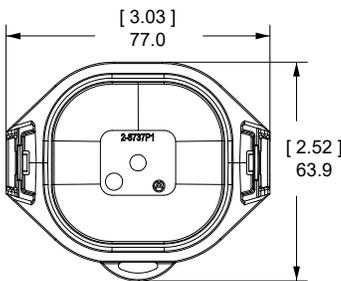


Mated View



Plug Cover Kit | PK9P-076

Front View

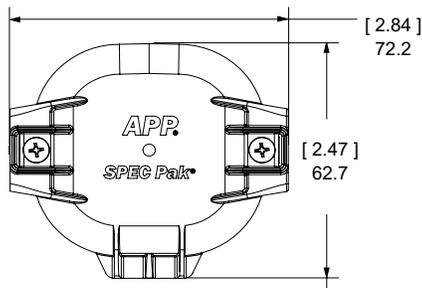


Side View

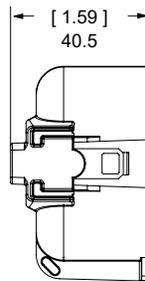


Receptacle Cover Kit | PK9-076

Front View



Side View



* Covers are only for transporting conditions; not UL6703 approved.

Your Best Connection™

All Data Subject To Change Without Notice 2020-0110 DS-MPSPAK5P-S REV 1

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